Implenia

Reference

Lötschberg Basistunnel







SHORT DESCRIPTION

The Lötschberg base line runs from Frutigen to Raron. In the north, it includes the connection to the BLS line and the Frutigen bypass with the Engstligen tunnel, the Lötschberg base tunnel and, in the south, the Rhone crossing and the connection to the SBB line.

THE PROJECT

At its heart is the 34.6-kilometre Lötschberg Base Tunnel, which consists of two single-track tunnel tubes that are around 40 meters apart and are connected every 333 meters via cross-passages. The tunnel was built in just 42 months from the start of pre-assembly in Bern to completion.

In a consortium (ARGE Bahntechnik Lötschberg), we carried out the contract for the railroad engineering equipment for the Lötschberg base tunnel from BLS-AlpTransit, Bern, as the overall project manager.

SERVICES IN DETAIL

- **Equipment ventilation** Execution as total contractor
- **Operational ventilation** Overall project management, contract, finances, quality assurance
- **Railroad technology** Execution as total contractor Implenia Schweiz AG and Rhomberg Bau AG
- **Integral safety concept** Execution as total contractor

CHALLENGES

- High demands on failure and supply reliability; above-average need for coordination due to many parties involved; difficult installation conditions in the tunnel.
- Tight deadlines; various project adjustments due to changes in the shell construction conditions.
- Due to the tight space conditions in the 2-tube single-track tunnel with little room for crossing or turning maneuvers, extreme demands on the entire logistics.

FACTS

Location	Niedergesteln , Switzerland
Status	completed
Construction volume (value of our services)	798 M CHF
Start of construction	October 2002
Completion	June 2007
Building owner	BLS Alp Transit AG, Aarestrasse 38B, CH–3601 Thun
Project designer	BLS Alp Transit AG, Aarestrasse 38B, CH–3601 Thun
ARGE	✓
Overall length	57000 m

SERVICES

Tunnelling